Illinois Department of Transportation

Memorandum

To: DIRECTORS, DEPUTY DIRECTORS, AND BUREAU CHIEFS

From: Scott Doubet

Subject: Technical Vacancy

Date: May 9, 2006

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement **Wednesday**, **May 10, 2006,** in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Tuesday, May 16, 2006**. Applicants will not be accepted after that time and date.

NOTE: Applications will be accepted from qualified permanent DOT employees only.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact Karon Hamrick or Karla Gathard at 217/782-5594.

CE VI	Traffic Program Engineer Division of Highways Region 1/District 1 Schaumburg

Attachments
31946

Resumes **must be received** by the Bureau of Personnel Management, Room 110, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/782-0931) by **Tuesday, May 16, 2006**, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on applications or resume. Applicants will be notified in writing to schedule interviews. **NOTE: Applications will be accepted from qualified permanent DOT employees only. A copy of each applicant's ACTIVE Illinois Professional Engineer License MUST accompany application for this position.**

Illinois Department of Transportation

An Equal Opportunity Employer

Position Summary Sheet

Classification: **Civil Engineer VI**

Position Title: **Traffic Programs Engineer**

Position Number: **PW116-23-51-901-00-01**

Salary Range: **$5,265 - $8,370**

IPR#: 31946

Appointee:

Name_____

Salary _____

Effective Date _____

Office Use Only

Office/Central Bureau/District:

Highways/District One/Schaumburg/Bureau of Traffic

Description Of Duties:

This position is accountable for improving the safety and efficiency of the traffic flow on the district's highways by directing and coordinating those activities related to the development of improvement programs for all types of traffic control devices; the application of appropriate design criteria to traffic signals, signing, pavement marking and other traffic control improvements; and development, design, evaluation and maintenance of the district's traffic signal network.

Special Qualifications:

The following criteria is required:

- An Illinois Professional Engineering license
- A valid Illinois driver's license

The following criteria is desired:

- B.S. degree in civil engineering with a broad knowledge of its principles and practices
- Minimum 5 years managerial experience
- Working knowledge of the MUTCD
- Strong oral and written communications skills

Remarks:

Please limit application and/or resume to two pages.

ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION

DATE:	*June 2005*	***POSITION:***	*Traffic Programs Engineer*
APPROVED BY:	*Terry Rammacher*	***OFFICE/DIVISION:***	*Highways/District One/ Schaumburg/Bureau of Traffic*
CODE:	*PW116-23-51-901-00-01*	***REPORTS TO:***	*Bureau Chief of Traffic*

Position Purpose

This position is accountable for improving the safety and efficiency of the traffic flow on the District's highways by directing and coordinating those activities related to the development of improvement programs for all types of traffic control devices; the application of appropriate design criteria to traffic signals, signing, pavement marking and other traffic control improvements; and development, design, evaluation and maintenance of the District's traffic signal network.

Dimensions

Subordinate Personnel	4 Direct 33 Indirect
Annual Operating Budget	$2,000,000
Annual Safety Improvement Program	$6,000,000 - $10,000,000
Annual CMAQ Improvement Program	$1,500,000 - $3,000,000
Annual Traffic Signal Improvement Program	$10,000,000 - $15,000,000
Number of Signalized Intersections Maintained	2,350 State Maintained 2,000 Locally Maintained
Number of Signal Systems	290

Nature and Scope

This position reports to the District Traffic Engineer as do the Traffic Permit Engineer, Traffic Services Manager, Arterial Traffic Operations Engineer, Expressway Traffic Operations Manager, Traffic Systems Center Manager and an Executive Secretary. Reporting to this position are the Unit Chiefs of Traffic Design, Traffic Signals, Traffic Studies and an Office Coordinator.

The physical characteristics of the District involving as they do urban, suburban and rural features constitute an unusual challenge to the proper development and design of traffic control devices. Because the District is highly urbanized, the District highway system is interlocked with a complicated network of state, tollway and local government highways and streets. With this urbanization, there has developed a condition where 55.5 billion vehicle miles are traveled annually on the District's highway system. This condition poses a constant condition of potential traffic disruption if traffic control devices are not properly planned and designed. Traffic signal responsibility includes direct maintenance of approximately 2,350 traffic signals and setting the sequence and timing for another 2,000 locally maintained signals. Proper traffic movement avoids motorist delays and because of this, commercial and business enterprises are encouraged to locate in this area. The District operates over 250 traffic signal systems of 3 or more coordinated intersections in the District, and have more in the contract or developmental stage. As intersections get signalized closer together, the need for system development is greater; which requires this position to anticipate the need for program development and design evaluation. Confronted with these conditions, this position is accountable for the development of short and long range traffic improvement programs which will improve the safety of vehicular and pedestrian traffic, improve speed of traffic flow and relieve congestion. This requires analysis of existing needs, establishment of project priorities and recommendation of projects to be included on the District's Annual Program.

Typical problems encountered by the incumbent include: determining the existing highway system's safety and capacity needs; ensuring adequacy of documentation to include projects on various traffic improvement programs; determining the applicability of micro-computer or time based coordination for a particular signal system;

establishing priorities for annual safety program, annual CMAQ improvement program and annual traffic signal program; ensuring the appropriateness of provisions covering joint participation agreements, master traffic signal maintenance agreements, contract documents and studies prepared by other District sections and/or outside agencies, including consultants, pertaining to the traffic funding and maintenance responsibilities; ensuring the application of the appropriate technical principles and skills to the design of complex sequence of operations and control settings for all types of traffic conditions; and establishing target letting dates for completion of traffic control design and plan preparation activities. The greatest challenge to this position is to select the appropriate traffic control devices that will improve traffic flow in a wide variety of demanding traffic situations.

The incumbent personally ensures the application of engineering policy and legal guidelines to the design and plan preparation of a wide variety of traffic control devices, such as, traffic signal installations, signing, intersection design and pavement marking which require accident and capacity analysis, and intersection design; establishes policies for standardizing the design and use of traffic control devices; ensures the optimum cost benefit results in the installation and operation of all traffic devices; establishes and maintains systems and procedures for providing technical assistance to other District bureaus and local agencies; and ensures prompt and complete responses to District and local agency requests; ensures proper documentation to support Traffic program and design proposals; and provides for the internal management of the section to ensure proper controls of budgetary expenditures and the safe and effective performance by subordinate staff.

The incumbent accomplishes these accountabilities through the following staff:

Traffic Design Engineer - who, with a staff of ten is responsible for the design and plan preparation covering all traffic control devices including signals, signs, pavement markings and other traffic control contracts.

Traffic Signal Engineer - who, with a staff of sixteen, is responsible for the operation and maintenance of all traffic signal intersections, plus the development of the annual traffic signal improvement program.

Traffic Studies Engineer - who, with a staff of six, is responsible for the development of the annual program for spot safety and low cost traffic improvements, and the completion of speed, capacity, accident and other traffic studies.

Office Coordinator - who performs clerical, filing and typing duties.

Though the incumbent works within the guidelines and policies governing traffic engineering activities, considerable independent judgment is required in the application of appropriate design criteria to traffic control devices that are used in urban, suburban and rural areas.

The incumbent must establish and maintain contacts with the Bureaus of Design, Construction, Local Roads and Programming to continually monitor progress of the annual program; the Central Bureau of Operations and the Office of Traffic Safety to obtain accident information and standards; and with electrical contractors, consultants, vendors of electronic equipment and local government agencies in the District, as well as, the Federal Highway Administration.

The effectiveness of this position is measured by the degree to which appropriate traffic engineering principles are applied to the design operation and maintenance of traffic control devices which will be evident in the improved safety and efficiency of traffic flow.

Principal Accountabilities

1. Provides for the proper selection of projects to be included on annual traffic safety programs, low cost traffic improvements and traffic signal programs.
2. Ensures the application of appropriate design criteria in the design and plan preparation of a wide variety of traffic control devices.
3. Ensures the proper application of current traffic technology, including appropriate computer programs, to traffic signal design.

4. Ensures the continuous and effective operation and maintenance of traffic signals.
5. Obtains inter-bureau cooperation that provides for the effective integration of traffic control features into project improvement plans.
6. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.